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MONTANA ENERGY ADVISORY COUNCIL

STATE CAPITOL

HELENA, MT 59601

BILL CHRISTIANSEN, CHAIRMAN

STATE DOCUMENTS
JAN 13 1976

January 6, 1976

MONTHLY ENERGY STATUS REPORT

Motor Fuel^{1/}

Motor fuel consumption in the United States is expected to be 112.8 billion gallons (426.9 billion liters) in 1975, a 2.6 percent increase over 1974, the Federal Highway Administration of the Department of Transportation recently announced.

Total consumption for each of the first six months of 1975 shows an increase from the corresponding month of 1974. However, the 1975 consumption is expected to be 1.4 percent below the level for 1973. The estimate is based on available reports from the states and other sources.

Natural Gas Sales Down for 1975^{2/}

Natural gas sales, lagging especially in the industrial sector, were about 6.6 percent below 1974 levels for the first nine months of 1975. A statistical report from the American Gas Association (AGA) shows industrial use through September 18.2 percent below a year earlier, while residential use was up 5.6 percent and commercial sales up 5.2 percent. AGA officials who compiled the statistics said they believed the sharp drop in industrial use showed an actual drop in demand due to the recession rather than reflecting curtailments.

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- 1/ Department of Transportation News, October 31, 1975.
2/ Weekly Energy Report, December 15, 1975.

Canada to Cut Oil Exports in Half by End of Next Year, Phase
Out in 1981 3/

Canada decided to reduce crude oil exports by about 30 per-cent on January 1, 1976. The new export level, set out in the latest National Energy Board oil report, will start at 510,000 barrels per day, compared to the current maximum of 750,000 barrels per day. But the average export level for 1976 will be even lower -- 460,000 barrels per day. And by the time the new Sarnia-to-Montreal pipeline reaches its peak capacity of 250,000 barrels per day by late 1976, exports will drop to 385,000 barrels per day, or almost 50 percent of the level only a year before.

The Montreal pipeline extension is designed to take extra western Canadian crude oil into the Montreal market, which has been traditionally supplied with imported oil. But, ironically, while the original intention was to make Quebec less dependent on insecure and higher-priced foreign oil, declining domestic oil production will require that the pipeline be reversed by about 1982 to carry imported oil into the Ontario market. The industrial heartland of Canada will become more dependent, not less, on the international oil market.

Unless Canada's deteriorating oil production situation suddenly stabilizes or improves, crude oil exports will reach what Canadian Energy Minister Alastair Gillespie describes as the critical level of 250,000 barrels per day by 1977. This is the amount of crude oil used by the United States Northern Tier refineries (all the refineries in Montana are included) wholly or largely dependent on Canadian crude. Scheduled export reductions in future years will bring the export levels to 160,000 barrels per day in 1978, 100,000 barrels per day in 1979, 45,000 barrels per day in 1980, down to the last trickle of 10,000 barrels per day in 1981.

Tar Sands Project Delayed^{4/}

The latest National Energy Board (NEB) oil report says that the outlook for Canada's domestic oil production has worsened since the first oil report a year ago -- the one that set off plans to phase out exports. The big change is the delay in development of the Athabasca tar sands -- witness the financial difficulties of the Syncrude project early this year. The NEB has stretched out its forecast

3/ Weekly Energy Report, FEA, December 1, 1975.

4/ Ibid.

of tar sands plants coming on line with syncrude production achieving the 1 million barrels per day level in 1994, instead of 1991 as forecast earlier. In addition, the NEB has reduced estimated producibility from conventional western Canadian oil reserves during the next decade. Overall, during the forecast period up to 1994, projected oil producibility in Canada has been adjusted downward by an average of eight percent, on top of last year's already gloomy predictions. This is the reason exports are being phased out in 1981 instead of 1983. (According to the NEB, Canadian oil self-sufficiency will end in September 1982.) The board also has decided again that Canadians cannot yet rely on any frontier oil from the western or high Arctic.

5/
Quote Of The Month

"If we had followed the advice given to President Truman in 1952" (when the Materials Policy Commission recommended that the United States begin aggressive research in the whole field of solar energy) "instead of relying on the nation's big business energy companies, we would now be saving as much as three million barrels of oil every day using solar heating and cooling equipment." (Senator Thomas J. McIntyre D-H.N.)

6/
Federal Government Saves

Federal Energy Administrator Frank G. Zarb recently reported the record on the federal government's energy conservation program continues to prove that good energy management pays off in substantial fuel and dollar savings.

"Over a 21-month period, we have brought federal energy consumption down an average of 24.5 percent, actually saving the equivalent of 164 million barrels of oil that would have cost \$1.4 billion," Zarb said. "It far exceeds the national goals of 7 percent savings in the first year of the program and 15 percent in the second year."

According to the FEA report, energy consumption by federal agencies dropped 28 percent for the quarter as compared with the same period in the 1973 fiscal year, or the equivalent of 27.5 million barrels of oil that would have cost \$255 million. About 19 percent of these savings were effected in the operation of government vehicles and equipment; 9 percent in buildings and facilities operations.

5/ Sun Times, AERO, October 1975.

6/ Federal Energy News, November 20, 1975.

The federal government uses almost 3 percent of all the energy used in the United States. Its energy savings are calculated on the amount of energy 26 agencies use in a given period of time compared with the same period of time in 1973. The agencies, which have been monitored for their energy consumption since the beginning of the program on July 1, 1973, use about 99 percent of all the energy expended by the federal government.

7/
Recycled Solid Waste

For every ton of steel produced from recycled municipal solid waste instead of ore, the following things happen:

(1) Enough electricity is saved to power the average American home for eight months -- a 74 percent saving in the amount of energy consumed to produce that one ton of steel.

(2) Two hundred pounds of air pollutants, of the kind produced in making steel from ore, are not produced -- an 86 percent decline in air pollution.

(3) About 6,700 gallons of fresh water are not used -- a 40 percent saving.

(4) As the water that is used is returned to streams and sewers, 102 pounds of water pollutants are not discharged -- a 76 percent reduction.

(5) And 2.7 tons of mining wastes are not heaped on the landscape around the mine.

8/
Energy Saving Tips of the Day

-- Use your kitchen vent sparingly. In just one hour, it can literally blow away a houseful of warmed air.

-- People generate heat. Turn heat back if you are having a "crowd" for dinner. Turn down the lights too, and serve by candlelight.

7/ "Coining Trash", Boyce Rensberger.

8/ Federal Energy News, November 24, 1975.

-- Cover leftover foods in the refrigerator to keep the moisture in the food. Moisture in the refrigerator reduces its efficiency.

-- Save electricity by doing as much ironing as possible in one stretch. A lot of energy goes into heating the iron initially.

-- Does your car need an oil change? Refill with the lowest SAE number recommended by the manufacturer. Remember -- heavy oil tends to increase friction and decrease fuel economy.

Energy Research in the Colstrip Area

A recent publication from the Office of the Montana Energy Advisory Council gives a detailed listing of "Energy Research in the Colstrip, Montana, Area".

This 97 page publication is available from the Lieutenant Governor's Office, Room 104, State Capitol, Helena, Montana 59601.

Montana Fuel Allocations

Fuels allocated for the Month of December totaled 604,348 gallons. Diesel fuel allocated totaled 361,500 gallons and gasoline allocated totaled 242,848 gallons.

Seventy-two percent of the fuels (255,500 gallons diesel and 182,348 gallon gasoline) allocated for December was issued to the Retail Resale Trade Sector. The Wholesale Trade Sector (55,500 gallons diesel and 60,500 gallons of gasoline) accounted for 20 percent of total fuels allocated.

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MONTANA ENERGY ADVISORY COUNCIL

STATE CAPITOL
HELENA, MT 59601

FEB 9 1976

BILL CHRISTIANSEN, CHAIRMAN

February 5, 1976

MONTHLY ENERGY STATUS REPORT

Aluminum Industry Conserving Energy^{1/}

With a goal to reduce energy required per pound of production by 10 percent by 1980 the aluminum industry reported to the Federal Energy Administration that it was half-way there by improving energy efficiency by 5.8 percent since 1972.

The eight most energy intensive industries, besides aluminum are: baking, cement, chemicals, copper, meat packing, paper, petroleum refining and steel. These industries account for over 50 percent of industrial energy consumption.

Energy Saving Booklet Available^{2/}

"In The Bank Or Up The Chimney" is a dollars and cents guide to energy-saving home improvements. This booklet is available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402. To order this document, specify Stock No. 023-000-00297-3.

People have been asked to insulate, turn down their thermostates, put on storm windows, protect their homes from the sun, and many other suggestions. Here is why: Fifty percent more energy is used in the homes than for all our cars, and about 223 million barrels of oil a year is wasted. Average cost per home for energy saving is figured at \$400, and this expenditure is returned in savings in five years.

Savings each year would be about one-third of the oil we imported last year. The 72-page book is priced at \$1.70.

1/ Arizona Energy Patterns, December, 1975.
2/ Ibid.

Oil-Shale Production^{3/}

According to the latest report issued by the Department of the Interior, oil-shale production could begin late this year, but the target production date is 1980. Four lease sales, totaling \$442 million, have been completed on tracts in Colorado and Utah. Wyoming has the other lands within the rich oil-shale region of the West.

Waste disposal, problems of land and water depletion, potential mutagenic pollution, and long-term biological and chemical stability of spent shale are some of the problems facing this development.

World Conservation Efforts Ranked^{4/}

The United States, Canada, and Switzerland have received the poorest energy conservation ratings among the 18 members of the International Energy Agency (IEA).

England was placed at the top for having one of the most comprehensive energy programs. The Germans cut oil use by ten percent last year.

Knowledge Is Power^{5/}

But where does the picture window go? Underground homes may be a thing of the future to save energy. The National Science Foundation says an underground home, with a dug-out courtyard to provide light, may cut heating and cooling energy requirements by up to 75 percent.

Super Battery: Energy scientists are working to develop a rechargeable battery to meet future energy needs. Such "super batteries" could be used to power electric cars, to supply electricity to businesses and home during peak use periods, and to store energy gathered from solar cells or wind generation.

3/ Ibid.

4/ Energy Reporter, FEA, January 1976.

5/ Texas Energy, Texas A & M, November 1975.

MPG's Improve PDQ: In tests conducted by the Environmental Protection Agency, 1976 model cars averaged 12.8 percent better fuel economy than 1975 models, and 26.6 percent better than 1974 models.

Energy Saving Tips of the Day

- By using glass or ceramic pots and pans on a conventional range, you may be able to lower the heat by 25 degrees without sacrificing cooking efficiency.
- Preheat your oven only when necessary.
- When possible, cook several things in your oven at once by taking the average of heat needed and setting the temperature control accordingly.
- Use lids on your pots and pans to keep the heat from escaping.
- Use the minimum amount of water when cooking, so it can heat quickly.
- Use small electric appliances in place of major appliances for specialized jobs. Electric skillets, toasters, waffle irons, popcorn poppers, electric fondue pots, bean pots and coffee pots generally use less electricity than a range does on the same jobs.

Brave New Trend^{6/}

Is it wrong for Americans, 6 percent of the world's people, to use 40 percent of its energy and raw materials? A recent Harris Survey shows a majority (23 to 61 percent) think so, and most (30 to 55 percent) believe we hurt the well-being of the rest of the world. Ninety percent agreed that consumers must learn to decrease use and waste, a surprisingly strong showing against high-use life styles.

6/ Energy Reporter, FEA, January 1976.

Curtailment of Canadian Crude Into Montana

Congress has appropriated \$500,000 to the Federal Energy Administration (FEA) to investigate the problem of, and the alternative solutions to, the announced Canadian curtailment of crude oil exports to the northern tier states from Washington to Minnesota.

The Montana Energy Advisory Council has been working with the other northern tier states and the Federal Energy Administration on this problem. Approximately one-third of the petroleum feedstock refined in Montana comes from Canada. The Canadian National Energy Board has announced plans to progressively curtail exports down to zero sometime in 1981.

Industry Pulling Out of Energy Related Projects

From April 8, 1974, to January 5, 1976, numerous industries have pulled out of many energy-related projects. Some of these projects include the Tar Sands Project in Canada, a uranium enrichment process, the construction of an on- and off-shore nuclear electrical generating plant, oil-shale development, oil and gas drilling exploration and others.

Several factors have determined the withdrawal of industry from the assorted projects. Included were escalating costs, difficulty in obtaining some types of construction materials, tight money, lack of proven technology, etc.

A few of the companies dropping out of these projects are Atlantic Richfield, Oil Shale Corporation, Ashland Oil, Shell Oil, Union Carbide, General Electric, Westinghouse, Texaco, Home Oil Ltd., Alminex of Canada, and Tenneco.

Montana Fuel Allocations

Fuels allocated for the Month of January totaled 440,226 gallons. Diesel fuel allocated totaled 230,300 gallons, and gasoline allocated totaled 209,926 gallons.

About 60.6 percent of the fuel (157,800 gallons diesel and 109,050 gallons of gasoline) allocated for the Month of January was issued to the wholesale trade sector within Montana. The retail trade sector (36,500 gallons diesel, and 86,500 gallons of gasoline) accounted for 27.9 percent of total fuels allocated.

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STATE DOCUMENTS MAR 9 1976
MONTANA ENERGY ADVISORY COUNCIL
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BILL CHRISTIANSEN, CHAIRMAN

March 1, 1976

MONTHLY ENERGY STATUS REPORT

Study Urges Better Use of Energy^{1/}

For the next 25 years the United States could meet all of its needs for new energy simply by making more efficient use of the energy it now uses, a report funded by the Federal Energy Administration has concluded.

The study, by the Worldwatch Institute, said that in doing so Americans could still "lead lives as rich, healthy and fulfilling" as they are today.

Americans, the report said, now consume twice as much fuel as they need. In 1975, it continued, they wasted more fuel than was used by two-thirds of the world's population. The conclusions rest on conservation estimates, the non-profit research organization said.

How do Americans save energy then, without feeling the pinch?

First, the report says, don't confuse curtailment with conservation.

"Curtailment" means giving up automobiles, "Conservation" means trading in a seven-mile-per-gallon status symbol for a 40-mile-per-gallon commuter vehicle.

"Curtailment" means a cold house, "conservation" means a well insulated house with an efficient heating system.

Here are some savings examples cited by the report:

-- In transportation (which takes about 42 percent of all fuel used), energy use could be reduced 16 percent directly and 6 percent indirectly by gradually tripling vehicle mileage, reducing vehicle size, using more transit and carpools for commuting and by shipping freight more economically.

1/ Seattle Times, February 11, 1976.

-- In housing (which consumes 25 percent of the nation's fuel; heating 18 percent, water heating 4 percent and air conditioning 3 percent), strict insulation standards for new buildings, insulation improvements in existing buildings and solar heating and cooling could cut use by at least 16 percent over the next quarter-century.

-- In foods, technical improvements in raising and processing could reduce energy use 3 percent. Home gardens, improved diets and a switch from "fast foods" could save 2 percent more.

-- In electricity, the cost of energy should be changed to discourage peak-hour use, thus reducing the need for costly new plants.

-- Waste heat from industrial sources, such as power plants, should be put to use. In Sweden about a third of that waste heat is used commercially. The United States "recaptures essentially none," the report said.

-- Another 4 percent could be saved by recycling wastes, including sewage and barnyard manure, paper, scrap iron and aluminum and by requiring returnable bottles.

European nations -- Sweden, West Germany and Switzerland -- live about as well as Americans and use only about 60 percent as much energy.

West Germany, for example, uses seven-eighths as much energy per capita for industrial production as does the United States, but only half as much per person for home heating and only one-fourth as much for transportation.

But the research group citing resistance to change, is not optimistic. It added:

Nevertheless, such a reduction is neither inevitable nor even very likely.

U. S. Oil Supply/Demand -- 1975^{2/}

The total demand for petroleum products in 1975 averaged 16.5 million barrels per day, including exports of 0.2 million barrels per day. At that level, demand was down

2.2 percent compared with a year ago. It was the second consecutive decline in U. S. oil demand after three decades of uninterrupted growth. Although the decrease could be attributed primarily to the depressed condition of the Nation's economy, it also reflected unusually warm weather and energy conservation gains, particularly in the industrial sector of the economy.

For the second year in a row, residual fuel oil demand recorded the largest decline among the major products. Residual consumption was 7.4 percent lower than a year earlier and 13.3 percent below the level of two years ago. Distillate fuel demand fell by 2.6 percent compared with a year earlier and was down 7.2 percent compared with two years ago.

Gasoline demand increased by 2.1 percent over a year ago. That gain, however, followed a supply restricted movement in the prior year, and consumption was virtually unchanged compared with two years ago. The other major transportation fuel, kerosine, was 0.9 percent above the year earlier level but still 8.9 percent lower than two years ago.

Most of the decline in the demand for other products was accounted for by lower demand for liquefied petroleum gases. Reflecting sharply reduced chemical market requirements, the over-all demand for LPG's was down 6.2 percent compared with a year earlier.

Compared with a year earlier, the over-all volume of oil supply decreased by 3 percent or 0.5 million barrels per day. Oil imports in 1975 averaged 6.0 million barrels per day -- 54 thousand per day less than the 1974 level. Averaging 4.1 million barrels daily, imports of crude oil rose 0.6 million barrels per day, but that increase was offset by an equivalent decrease in the level of refined product imports.

Supplies from domestic sources totaled 10.5 million barrels per day, down 0.5 million per day from the year earlier average. Based on preliminary data, crude oil production in 1975 compared with the prior year as follows:

	<u>1975</u>	<u>1974</u>		<u>Change</u>
	<u>Thousand Barrels Daily</u>			
Texas	3,345	3,454	-109	- 3.2
Louisiana	1,781	2,018	-237	-11.8
Other States	<u>3,226</u>	<u>3,293</u>	<u>- 67</u>	<u>- 2.0</u>
	8,352	8,765	-413	- 4.7

Reflecting the lower level of domestic crude oil production, the proportion of demand satisfied by domestic sources continued to decline in 1975. As noted in Figure 3, United States dependence upon foreign sources of supply increased rapidly during the past five years. And, in 1975, despite the decrease in demand, domestic oil self-sufficiency reached a new low of 63.7 percent.

3/
The New Energy Law

Since the 1973-74 oil embargo, some 2,600 energy bills have been introduced in Congress, involving 89 committees and subcommittees, including the President's plan for a national energy policy proposed last January. Out of the legislative process emerged a sweeping energy bill, now law, the Energy Policy and Conservation Act (Public Law 94-163).

The act contains a number of provisions such as mandatory energy efficiency labeling of appliances and standards for improving auto fuel efficiency over the next five years.

Reactions to different parts of the new law vary. Some of the act's features, such as the section calling for a strategic petroleum reserve of up to a billion barrels of oil to cushion the blow of any future embargo, have been widely praised. On the other hand, the temporary lowering of oil prices enjoyed, at best a mixed reception by consumers and industry.

The Wall Street Journal, for example, says the legislation "won't really stick motorists and homeowners with steeply higher fuel bills or tough government energy conservation decrees." Energy Reporter asked FEA chief Frank Zarb about the new law:

Q. Mr. Zarb, is the new law consistent with America's energy independence goals?

A. Well, this act is less than I would have liked with respect to oil prices, but it does provide authority to gradually decontrol oil prices over 40 months. Also, the legislation encompasses much of the President's major proposals, such as one giving FEA authority to force utilities and industrial plants to convert from oil and gas to coal, which we have in ample supply for several hundred years.

Q. What will this bill mean to consumers?

A. The pricing provision lowers the average price of all crude oil refined in the United States by about 2-1/2 cents per gallon. Because of marketing and regulatory factors, the short-term effect on actual prices paid for gasoline will probably be 1 cent or less per gallon.

Q. A recent editorial in the Philadelphia Inquirer said the law is "better than nothing" ... but cannot get (us) out of the clutches of (the producers) ... power to arbitrarily increase fuel prices." Does President Ford have the flexibility to raise prices enough to insure U. S. oil exploration will be a worthwhile investment?

A. Yes, it provides enough incentive for maximum oil production. Starting in March, and every month thereafter, the crude oil price will be adjusted upward to reflect inflation increases and production incentives. The price can rise as high as 10 percent a year. Necessary increases over and above the 10 percent limit can be made at 90-day intervals, if not disapproved by Congress.

Vietnamese Oil -- What Now?^{4/}

Before the Saigon government fell, western oil companies were negotiating for rights to locate and develop oil and gas fields in the South China Sea. After more than a year, the fate of that petroleum remains very much undecided.

A major east coast newspaper recently reported Exxon had contacted Hanoi about resuming the search for oil. Company spokesmen in New York deny the story, and State Department officials in Washington tell us that oilmen are carefully observing a U. S. embargo which prohibits transactions between our companies and the new Vietnamese regime.

Meanwhile, French and Japanese firms, also interested in Vietnamese oil before Saigon fell, are reportedly contacting Hanoi about possible oil deals. Senator Mark Hatfield is seeking to lift the U. S. ban.

Coal Rush^{5/}

To spur mining development on government-owned lands, the Department of Interior has proposed that leaseholders be

4/ Ibid.

5/ Ibid.

required to start producing from one or more of their federal leases within ten years after they receive the lease (or after the effective date of the new regulations).

Oil Profits Drop^{6/}

Oil company profits continued to decline in the second half of 1975. One assessment of the decline is provided in a new report from Chase Manhattan Bank. According to this study, in the third quarter of last year, 29 companies suffered a \$3 billion, or 30 percent, drop in profits since 1974.

Energy Saving Tips of the Day^{7/}

- Insulate any heat ducts that run through your attic. Heat lost from attic ducts is totally wasted.
- If your house has a crawl-space under the foundation, close off vents or other openings to the crawl-space. This will reduce heat loss through the floor, save energy, and reduce heating costs.
- Purchase slightly less than a full tank of gasoline to prevent overflow. The gasoline you lose is pure waste.
- You don't need to keep your oven going to serve warm bread or rolls. Try heating a ceramic tile while the oven is on; then wrap the hot tile in a napkin with the bread or rolls and put them in a serving basket. They should remain warm throughout the meal.
- When ironing, start with fabrics that require low heat. This will save energy by reducing the warm-up time for linens and other fabrics that need higher ironing temperatures.

^{6/} Ibid.

^{7/} Federal Energy News, January 28, 1976.

Montana Fuel Allocations

Fuels allocated for the Month of February totaled 341,500 gallons. Diesel fuel allocated totaled 175,700 gallons, and gasoline allocated totaled 165,800 gallons.

For the Month of February, the Retail Trade Sector received a total gallonage of 217,500 (128,800 gallons of gasoline and 88,700 gallons of diesel fuel) or 63.6 percent of total allocated fuels. The Wholesale Trade Sector received 31.9 percent of fuels allocated (72,000 gallons of diesel and 37,000 gallons of gasoline).

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STATE DOCUMENTS

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MONTANA ENERGY ADVISORY COUNCIL

STATE CAPITOL

HELENA, MT 59601

BILL CHRISTIANSEN, CHAIRMAN

April 5, 1976

MONTHLY ENERGY STATUS REPORT

MEAC Assembling Historical Energy Statistics

A new MEAC staff member, Terry Wheeling, is currently involved in assembling historical energy statistics for the State of Montana. Data is being collected from published reports of state and federal agencies and industry organizations concerning reserves, production, processing, consumption and prices for five fuel sectors; natural gas, crude petroleum and petroleum products, coal, electricity and uranium. Assembly of data for the natural gas and petroleum sectors has been completed in an initial form. MEAC plans to publish the statistics for all five fuel sectors in a single volume. The data will also be automated to facilitate use by agencies and researchers in the energy field.

Mr. Wheeling attended the University of Montana at Missoula, majoring in Math and Computer Science. As a staff member of the University of Montana Coal Demand Study, he has done previous research work investigating the potential development of coal resources in the Fort Union Basin.

55 MPH Speed Limit Enforcement By All States^{1/}

According to certificates filed with the U. S. Department of Transportation (DOT) all 50 states are enforcing the 55 mile-per-hour speed limit. Now the DOT will decide whether the states are actually enforcing the law when it completes its review of the speed monitoring and other data submitted by the states. This review is being done by the Office of the Chief Counsel in DOT's Federal Highway Administration.

^{1/} The Council of State Governments, March 22, 1976.

Statistics based on speed trend surveys, conducted by state highway agencies in 1975 and previous years, show that:

- The average speed for all vehicles moving in uncongested traffic has remained below the 1973 level;
- Last year 55 percent of vehicles exceeded 55 mph, up from 51 percent in 1974; and 70 percent in 1973;
- 21 percent of all vehicles exceeded 50 mph in 1974 and 1975, compared to 50 percent in 1973;
- 6 percent exceeded 65 mph in the last two years, against 31 percent in 1973;
- Between 1973 and 1975 passenger car speeds declined by 5.4 mph and bus speeds by 5 mph, while truck speeds went down by 1.8 mph, and;
- The average truck speed of 54.8 mph, is lower than the average passenger car speed of 56.2 mph and bus speed of 55.4 mph.

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Westfield Coal Gasifier Records Long Runs

The American sponsors of a coal gasification project near Edinburgh, Scotland, said recently that the plant marked a major advance with two seven-day runs and production of up to 25 million standard cubic feet of synthesis gas per day -- enough to supply the daily residential requirements of a community of 50,000 persons.

The "slagging" gasifier plant at Westfield Development Center, operated by British Gas Corporation, produces a medium-BTU gas suitable for further conversion to pipeline quality gas.

Officials said successful removal of ash in a molten-slag form made possible the production of high volumes of gas -- up to four times the amount produced in conventional systems of the same size where ash is removed as a dry solid.

The high-pressure slagging gasifier also extends the range of coals that can be gasified and reduces the amount of steam used, officials said. They added that the net result should be substitute gas at lower cost, but cost of the gas to consumers will not be known until a demonstration plant has been built.

Montana Red River Discovery Completed^{3/}

In the Williston Basin, Kenneth D. Luff completed an Ordovician discovery in Richland County. It flowed 235 bbls of oil a day from Red River, perforated in a net 26 feet between 12,576 and 12,638 feet. The new area of production is about four miles southwest of the Silurian and Ordovician pools, in Montana's North Sioux Pass field, discovered by Luff and others in 1973. It is also the same distance northwest of Sioux Pass field.

Canadian Pipeline Hearing Delay Will Have Impact on the U. S.'s^{4/}
Decision Schedule

Canada's Mackenzie Valley gas pipeline hearings will start all over again, as a result of the recent Canadian Supreme Court decision disqualifying National Energy Board Chairman Marshall Crowe from continued participation in the hearings. Crowe had been associated with one of the pipeline applicants, Canadian Arctic Gas, before joining the NEB.

The net loss of time is more than 30 days of evidence presented since late October. It will also require they appoint a completely new three-man panel for the hearings and this is designed to head off further court battles with public interest groups. This makes it difficult, if not impossible, for the Canadian government to arrive at a final decision on whether a pipeline is needed (and on the route) by early 1977, the time when the U. S. government is aiming for its own decision. The Arctic Gas consortium stands to lose more from the delays than its all-Canadian and all-American competitors on either side of the border. The U. S. Congress might have to go slow on two bills before it now that would select one of the U. S. projects over the other. Too quick a decision could force the Canadian government into an embarrassing position and kill any hopes of a joint Canada-U. S. pipeline.

^{3/} Petroleum Information, March 4, 1976.

^{4/} Weekly Energy Report, March 22, 1976.

Federal Study Calls Coal Price Outlook "Favorable"^{5/}

The Federal Council on Wage and Price Stability said in a 97-page report on coal prices that "the sharp increase in coal prices" in 1973-74 reflected an abnormal surge in demand "for a product whose immediate supply cannot be expanded rapidly". It said the outlook for coal prices in the next decade "is favorable".

The report said that in terms of 1975 dollars the prospects are good "for stable prices" in coal and "in some parts of the country declining prices" in the next decade. "The key here is western coal," it was said. "Any sizeable development of the nation's western coal reserves will place substantial downward pressure upon coal prices."

The reasons for this, the report said, are: the supply is vast; it is "relatively inexpensive to mine"; it is "low in sulfur" and, therefore; less expensive to burn cleanly.

But the actual price level for coal, at any time in the next decade, "will depend on what happens with several critical factors currently constraining the development of new western mines," it said. Major coal development is hampered, according to the report, by the uncertainty surrounding:

"The outcome of federal environmental policies regarding sulfur oxide emissions, strip mining reclamation and coal leasing" and by "future growth rates in demand for generation of electrical power".

Eight-Fold Increase In Waste Oil Re-Refined Forecast^{6/}

Although there has been a steady decline in production since the early 1960's, lubricating oil to be re-refined from waste oil is expected to increase from 110 million gallons valued at \$134 million in 1975 to 840 million gallons valued at \$1 billion by 1985, according to a new study by market research specialists, Frost & Sullivan, Inc.

Projecting that the industry will grow overall at a 23% annual rate through 1985, the report says "the growth in re-refined lubricating oil will be at the expense of waste oils used as a fuel and in road oil and asphalt, and other applications".

5/ Coal News, March 19, 1976.

6/ Land Pollution Reporter, March/April 1976.

The stepped-up efforts to reclaim crankcase oils, transmission fluid, defferential gear lubricants, hydraulic oils and other waste oils result from an increasing pressure to conserve energy resources, the study notes. It adds that the resurgence is also being prompted by the need to stop the disposal of waste oils in sewage systems and by expected changes in labeling requirements and tax regulations that now work against re-refined lubricating oils.

Woodwaste Used By Textile Manufacturer For Power^{7/}

Russel Corporation of Alexander City, Alabama, this country's largest manufacturer of athletic apparel, recently installed a new industrial boiler system to utilize waste-wood -- wood chips, sawdust and bark -- as its primary fuel. This is the first non-wood product related company in the U. S. to make a changeover from coal and oil to wood chips for power. The company will buy the wood wastes from sawmills; the material formerly had little or no commercial value.

Promoters of industrial boilers fired by wood chips say they are expected to make a comeback. Some of the reasons given are:

- (1) Air pollution control equipment costs less than that required to burn coal;
- (2) Potash, the residue left from burning wood can be recycled since it is a basic ingredient for agricultural fertilizer;
- (3) Wood is cheaper per million BTU's than oil or coal; and
- (4) By using modern technology to harvest forest residues -- such as dead or diseased trees -- wood chips are available throughout the U. S. without touching the "merchantable" timber supply.

Car and Gas Consumption^{8/}

Each year the average American car consumes its weight in gasoline, and almost \$4,000 is spent for gas for every 100,000 miles it is driven, according to a recent Missouri Energy Agency study, "Gasoline: Energy Report to the People".

7/ Land Pollution Reporter, March/April 1976.
8/ Ibid.

Federal/State Energy Conservation Plans^{9/}

The Federal/State Energy Conservation Plans were adopted by the National Governor's Conference during their recent meeting in Washington, D. C.

The Energy Policy and Conservation Act (signed on December 22, 1975) establishes a program for state energy conservation plans, to be developed by each state with technical assistance from FEA and other federal agencies available. The program authorizes \$50 million for each year for fiscal 1976-78. However, the amount of money that will actually be available to the states will depend upon how much is appropriated within the ceiling of the authorization.

The program is voluntary, but to be eligible to receive financial assistance for the development of a state plan, the Governor must prepare and submit to FEA a Feasibility Report within three months after the effective date of the Feasibility Report Guidelines. The proposed Feasibility Report Guidelines were published in the Federal Register on January 29 for comments.

Under the Act, any state energy conservation plan must include the following measures:

- (1) Mandatory lighting efficiency standards for public buildings;
- (2) Programs to promote the availability and use of carpools, vanpools and public transportation;
- (3) Mandatory standards and policies relating to energy efficiency to govern the procurement practices of the state and its political subdivisions;
- (4) Mandatory thermal efficiency standards and insulation requirements for new and improved buildings; and
- (5) A traffic law or regulation which, to the maximum extent practicable consistent with safety, permits the operator of a motor vehicle to turn such vehicle right at a red stop light after stopping.

^{9/} National Governors' Conference Newsletter, January 30, 1976.

Make The Most Of Your Energy Dollars -- NBS Urges Home Owners ^{10/}

"Making the Most of Your Energy Dollars", a 16-page booklet published by the National Bureau of Standards, tells any home owner in the United States -- in terms of his climate and his energy costs -- how to determine the most economical combination of energy-conserving improvements.

The NBS states: "You may be surprised to learn how much insulation you should install. In some parts of the country, when higher-priced fuels are used, R-38 insulation (about 12 inches of mineral fiber batts) in the attic is recommended to give the best results. Even in milder climates, R-30 insulation (about 10 inches) may be economically justified if you use oil or electric heating at current high prices.

"You may be just as surprised to learn that investing in energy conservation improvements now can earn you greater dividends, than putting your money in the bank."

Extra copies are available from the National Mineral Wool Insulation Association, 382 Springfield Avenue, Summit, New Jersey 07901 (70 cents each for 10 copies or fewer; a lower price is available for larger quantities).

Take Life-Cycle Cost Approach, Says GAO ^{11/}

In a report to Congress, the General Accounting Office suggests that life-cycle costing, rather than lowest initial construction cost, be considered as the economic basis for housing construction.

Life-cycle costing is defined as including initial cost, plus the cost of owning and operating a house over a specified length of time. As applied to residential construction, it is a means of achieving improved energy conservation.

In the report, "National Standards for Residential Energy Conservation," the GAO states, "Increasing the thermal standards or requirements, which must be met in housing construction, offers the greatest opportunity for reducing energy usage in the residential sector. Installing increased thickness of insulation, double glazing of windows and the construction of "tighter" homes are examples.

^{10/} Insulation Reporter, December 1975.

^{11/} Ibid.

12/
Energy Saving Tips Of The Day

- Any extra blanket may allow you to set back your furnace's thermostat at night.
- If building a new home, proper placement of your hot water heater, furnace, and refrigerator can save you hundreds of dollars of energy costs in the next ten years.
- Read your appliance manual to find the optimum temperature for your refrigerator and freezer.
- Vent your dryer and make sure the vent stays free of lint.
- Turn off your iron just before you're finished and you can still efficiently complete the job since irons retain heat for some time.
- Don't overload your washer or dryer. It will cut down on efficiency.
- Use microwave ovens to reduce power consumption by as much as 75 percent for the same cooking task done in an electric oven.

Montana Fuel Allocations

Fuels allocated for the Month of March totaled 617,998 gallons. Diesel fuel allocated totaled 285,980 gallons, and gasoline allocated totaled 332,018 gallons.

For the Month of March, the Retail Trade Sector received a total gallonage of 295,100 -- 157,100 gallons of gasoline and 138,000 gallons of diesel fuel, or 47.7 percent of total allocated fuels. The Wholesale Trade Sector received 284,898 percent of fuels allocated -- 118,980 gallons of diesel and 165,918 gallons of gasoline.

12/ Federal Energy News, January 28, 1976.



MONTANA ENERGY ADVISORY COUNCIL

STATE CAPITOL
HELENA, MT 59601

BILL CHRISTIANSEN, CHAIRMAN

MAY 8 1976

STATE DOCUMENTS

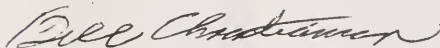
May 3, 1976

Readers of the Montana Energy Advisory Council Energy Status Report:

The Montana Energy Status Report will no longer be issued by the Montana Energy Advisory Council. The report initially was intended to provide up-to-date information regarding petroleum product supplies during and subsequent to the Arab oil embargo. We also intended to provide useful energy conservation information, there being few other publications presenting such information at that time. In light of the status of the fuel allocation issue, and the number of energy publications now available to the concerned public, there is no need to continue the Montana Energy Status Report.

We wish to thank our readers as well as those who supplied our office with information of relevance to the purpose of the Montana Energy Status Report.

Sincerely,



Bill Christiansen
Lt. Governor

BC/tc/mt

